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APPLIED PSYCHOLOGY | RESEARCH ARTICLE

Effect of group education on self-efficacy and craving tendencies in drug abusers in 5th Azar Drug Abuse Treatment Center of Gorgan

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Abstract: The present study aims to determine the effect of group education on self-efficacy and craving tendencies in drug abusers. The control group completed craving tendencies and self-efficacy questionnaires. The control group received a normal clinical intervention and then completed the questionnaires again after a month. The experimental group completed two questionnaires of craving tendencies and self-efficacy. They were subjected to eight 90-min sessions of group learning in one month (twice a week). Posttests were conducted after the interventions. Before intervention, control and experimental groups showed insignificant difference in terms of self-efficacy; however, after the intervention, there was a significant difference between these two groups ($p = 0.026$). Furthermore, the results of within-group comparison revealed that there was a significant difference in the experimental group before and after the intervention ($p = 0.009$) so that self-efficacy average increases after the intervention while there was no such significant difference in control group. Moreover, craving tendencies did not show significant difference between the experimental and control groups ($p = 0.001$), whereas the mean craving tendencies in experimental group were lower than that in control group. Also, craving tendencies decreased significantly after the intervention in the experimental group whereas no significant difference was found in control group.

Subjects: Addictions and Substance Use; Nursing Research; Mental Health Nursing

Keywords: group education; self-efficacy; craving tendencies; drug abuse

Fatemeh Sheykhnezhad

ABOUT THE AUTHORS

Dr. Naeimeh SeyedfatemiThe authors mainly focus on studies where non-medicinal approaches are taken into account when it comes to treating drug abusers. The present study is in line with the authors' previous studies where they have considered various aspects of nursing practice to yield better results when working in clinics treating drug abusers.

Dr. Naeimeh Seyedfatemi is an experienced faculty member in Iran University of Medical Sciences at Nursing Care Research Center. She has carried out extensive research on nursing practice to treat drug abuse.

Ms. Fatemeh Sheykhnezhad has fulfilled her master degree in Iran University of Medical Sciences. Currently, she is also working as a nurse.

PUBLIC INTEREST STATEMENT

The present study aims to determine whether group education could have positive effects on drug abusers in terms of self-efficacy and craving tendencies. After the group education for the subjects of intervention group, they significantly built up self-efficacy and the level of craving tendencies in them decreased considerably. These results could be of great interest for public because they might benefit from the results of these actions to improve drug abusers in their surroundings. Furthermore, they may use the results of this study to extract very easy measure to cope with risky conditions, which otherwise might lead to drug abuse and/or tendency toward using substances.

1. Introduction

Drug abuse is one of the most important socio-mental disorders, which destructs corporeal and spiritual resources (Mesrahi, Sedighi, & Shirali, 2016). Several people tend to drug abuse on a daily basis and suffer from its physical, mental, cultural, economic, and social consequences. It has been estimated that 175–250 million people from 15 to 64 years old have committed drug abuse at least once since 2007 (Rehm, Patra, & Degenhardt, 2010). Drug abuse in Iran has witnessed an ascending trend, which in part could be due to its geographical situation and easy access to drugs. In Iran, drug abuse rises 8 percent annually and it has turned into a social, economic, mental, and family concern. A recent official figure has stated that circa 2 million people in Iran are suffering from drug abuse whereas unofficial reports have estimated it to be between 3 and 4 million (Fereidouni, 2014).

Relapse and lack of control over substance abuse is still one of the important problems of sufferers (Jalali, Seyedfatemi, & Peiravi, 2015). Post-treatment relapse in drug abusers is inevitable where craving beliefs lead them to recommit substance abuse; in other words, craving belief is an indicator of drug abuse and relapse (Minervini, Palandri, Bianchi, Bastiani, & Paffi, 2011). Craving is a powerful and continuous desire for drug and forms a strong drive to incline to drug (Badger et al., 2007). Craving is referred to as wanting, desire, need or necessity of substance abuse. It is a conscious tendency to drug and foundation of substance abuse, lack of control ad relapse (Hernandez & Araiza, 2014). Craving is particularly important in defining several addictive behaviors and is adopted to show high level of drug abuse. It can also bring about a wide range of annoying experiences such as sadness, boredom, stress and social withdrawal (Reese & Veilleux, 2016).

Self-efficacy is known as the most important factor in appearing, keeping, and changing addiction related behaviors (Nikmanesh, Baluchi, & Motlagh, 2016). The notion encompasses such elements as action plan, awareness, organization of required skills, and level of motivation in a given situation (Kadden & Litt, 2011). Those with low level of self-efficacy cannot adapt themselves well with the issues pertaining to substance abuse while those with higher levels of self-efficacy exhibit stronger will to change their addictive behaviors (Torrecillas, Torres Cobo, Delgado, & Ucles, 2015). Ibrahim, Kumar, and Samah (2011) found a negative and significant relationship between self-efficacy and addiction relapse. Furthermore, Dolan et al. (2008) stated that the patients with higher level of self-efficacy show more tendencies to withdraw and also exhibit higher consistency when facing with risky situations. Although self-efficacy can prevent from relapse of drug and alcohol dependence (Yildirim & Ilhan, 2010), very few studies have focused on various aspects of self-efficacy in drug abuse.

Relapse is a consistent and continuous process and the patient should be both physically and mentally prepared for treatment (Marlatt & Donovan, 2005). Therefore, mental treatments are also necessary to cure drug abuse (Nikmanesh et al., 2016). A special plan for a continuous post-treatment support will augment complete improvement in drug abusers. Such a plan may instruct drug abusers how to exert preventive measures in risky conditions (Videbeck, 2013). One of the most effective mental treatments to cure substance abuse is group education, which accelerates improvement of patients by enhancing their awareness, knowledge, hope, social techniques, and behavioral, emotional and cognitive changes (Mesrahi et al., 2016). Group education may improve the treatment by developing intrapersonal and coping techniques in drug abusers and also by educating their families (Shives, 2012).

Nurses are the frontlines in dealing with drug abusers and could be responsible for holding evidence-based programs including social skills, groups programs and motivation enhancement. They can motivate the patients to recognize life problems and adverse effects of drug abuse in aggravating such problems and show them how to concentrate on problems by giving them required information; accordingly, they can play a prominent role in reducing the risk of relapse in drug abusers (McKeever, Spaeth-Brayton, & Sheerin, 2014). Taken together, self-efficacy is a strong predictor in drug abuse treatment. Furthermore, craving beliefs is a key factor in the tendency to abuse drugs after a period of leaving drug abuse. There are few studies highlighting the intervention through group means to treat drug abusers. To the best of our knowledge, there

has been no study focusing on the combinational effect of group education of craving beliefs and self-efficacy on drug abuser. Therefore, the present study determined the role of group education on self-efficacy and craving beliefs in drug abusers in 5th Azar Drug Abuse Treatment Center of Gorgan, Iran. There were two hypotheses considered in this study: group education increases self-efficacy in drug abusers; group education decreases craving tendencies in drug abusers.

1.1. Objectives

(1) Determination and comparison of self-efficacy between control and experimental groups of drug abusers before and after the intervention.
(2) Determination and comparison of craving beliefs between control and experimental groups of drug abusers before and after the intervention.
(3) Comparison of self-efficacy in experimental group of drug abusers before and after the intervention.
(4) Comparison of craving beliefs in experimental group of drug abusers before and after the intervention.

2. Methodology

2.1. Study design and setting

This is a quasi-experimental study where a pre- and posttest design were utilized with a control group. The present pretest–posttest clinical trial study was performed in 5th Azar Drug Abuse Treatment Center of Gorgan, Iran, which is a well-known governmental center for substance use treatment. Regulations are based upon Iranian Protocol for Drug Abuse Treatment. The abusers are controlled by long-term medicinal treatment. Furthermore, morphine test and paraclinical tests are carried out on a monthly basis to make sure the patients avoid abusing drugs. Treatment in this center is performed using methadone and buprenorphine, which are opioids used to treat substance abuse. It is noteworthy that group education had not been performed for drug abusers before the current study.

2.2. Sample

One hundred drug abusers (50 in control group and 50 in experimental group) who had been coming to the center for at least one month were considered. Inclusion criteria were as follows: drug abusing males and females; ≥18 years old with at least reading and writing ability; without any other physical and/or psychological disorder; visiting the center for at least one month; interest in participation. Exclusion criteria were as follows: a sudden stress factor such as family or relative death; absence in group education more than three sessions; participation in rehabilitation and prevention sessions.

Sampling was performed after obtaining permissions from Ethics Committee of Iran University of Medical Sciences, Tehran, Iran and Gorgan University of Medical Sciences, Gorgan, Iran. The technique adopted was probability sampling through a simple random approach. To avoid any bias, control samples were first selected according to inclusion criteria.

2.3. Measurements

2.3.1. Demographic information questionnaire

The questionnaire is related to demographic information of the subjects, including age, gender, education level, marital status, number of children, economic status, employment status, accommodation, age of drug abuse onset, how to use drugs, number of withdrawal attempts, drug abuse in family, type of drug, and method of withdrawal.

2.3.2. Drug and alcohol abstinence self-efficacy (DAASE) scale (Diclemente, Carbonari, Montgomery, & Hughes, 1994)

The scale measures self-efficacy and self-confidence in resisting against drug abuse. It includes 20 statements and uses a 5-point Likert scale (1 = without self-efficacy and 5 = very high self-efficacy).

The scores range from 20 to 100 where high scores show high self-efficacy in drug abstinence. Variation in self-efficacy scores indicates effectiveness of group education .

2.3.3. Craving beliefs questionnaire (CBQ, Wright, 2001)

The questionnaire measures tendencies toward drug abuse and includes 20 statements with a 7-point Likert scale (7 = completely agree and 1 = completely disagree). The scores range from 20 to 140 where lower scores indicate that the patient has lower tendency to and higher resistance against drug abuse (Ashrafioun, 2014).

2.3.4. Validity and reliability of DAASE and CBQ

In order to determine validity of the tools, permissions were first obtained from the scale developers through email. Afterwards, two competent translators translated the scales into Persian. The translated versions were revised by the research team and then, the revised Persian versions were translated into English by two other competent translators. After few revisions, the translated versions were sent to the scale developers through email to get permission. Ten professors of nursing and psychology confirmed validity of the translated tools. Internal reliability of the questionnaires was confirmed by running Cronbach's alpha test. DiClemente et al. (1994) found a Cronbach's alpha of 0.92 for the scale and they found Cronbach's alphas of 0.88, 0.82, 0.83 and 0.81 for the negative affect, social pressure, physical pain/illness, and thoughts about using alcohol subscales, respectively.

2.4. Data collection

To control the data, control and experimental group were admitted at the center in the morning and evening, respectively. Data collection began in March 2016 for two months for control group. The first author gave the tools every morning to the control group (pretest). One month later, the tools were given to the subjects again (posttest). The pretest in experimental group was performed the same way as it was in control group. However, posttest in experimental group was taken after the last group education session.

2.5. Procedure

Informed written consents were obtained from the subjects before starting the study and the objectives and importance of the work were explained to them. The experimental group was classified into five subgroups (N = 10) and the sessions were held at the center. Eight group education sessions (each 90 min and twice a week) were held everyday except Thursdays and Fridays (weekends in Iran) from 4 pm to 7 pm. Table 1 depicts the content titles of the sessions. The sessions for experimental group began on April 2016 and lasted for three months. All the participants attended the sessions in the given period. They sat in circle and participated in class discussions. The sessions were performed by the aid of a competent counselor. Sessions were performed by giving speech, role-play, group discussion, and question-and-answer using pamphlets. The educational pamphlets were given to the participants each session and the booklet containing all the pamphlets were presented to the subjects. All the sessions were performed in evidence-based mode were the researcher attended the sessions to make sure the group education is being run appropriately and according to plans. During the sessions, the researcher encouraged the participants to take part in the group discussions related to questions and uncertainties and at the end of the sessions, the researcher concluded the discussion and asked the participants to practice the skills at home. Phone numbers of the research and the center were given to the participants in case there were questions. After posttests, some gifts were given to the participants to thank their collaboration.

2.6. Data analysis

Data analyses were performed by through SPSS version 20 (IBM SPSS Statistics, Chicago, IL, USA). Descriptive analyses were carried out using measurement of frequency, mean and standard deviation. Significant differences were evaluated by variance analysis, Mann–Whitney U test, independent samples t-test, and paired samples t-test.

Table 1. Content titles of the group education sessions

Session	Content titles
1st	Definition of drugs and addiction; Who is considered a drug abuser?; what kind of people are more leaning to abuse drug?; Different methods of drug abuse
2nd	Different types of drugs and their symptoms and consequences; the drugs explained included opium, ecstasy, methadone, morphine and heroine
3rd	Effects of drugs on drug abusers: physical effects, mental effects, effects on family (emotional effect, effect on spouse and parents, effect on children), social effects
4th	Definition of craving and its factors (chronic factors, wrong thoughts, habits, gradual process of craving), symptoms (e.g. constant thinking of people, places and times of drug abuse) and stages (emotional craving, mental craving, physical craving)
5th	Alarm signs of craving; solutions and strategies to resist against craving; wrong beliefs of drug abusers towards craving; definition of relapse and its symptoms
6th	Strategies to fight against craving beliefs and enhancing self-efficacy: effective management of emotions and expressing emotions and feelings
7th	Strategies to cope with craving beliefs: definition of anger, controlling anger and negative thoughts, symptoms of anger
8th	Strategies to fight against craving beliefs and enhancing self-efficacy: boosting positive thoughts and emotions; various ways of enhancing positive thoughts

3. Results

Table 2 shows the demographic information of the participants in the present study. According to the table, experimental and control groups show no significant differences in terms of all the criteria ($p > 0.05$) except for employment status and number of withdrawal attempts ($p < 0.05$); in other words, except for the two criteria mentioned, experimental and control groups were uniform. It should be noted that Table 2 does not include employment status and withdrawal attempts because the results of analysis of a variance showed that they show no significant relationship with craving beliefs and self-efficacy and therefore, they were not intervening variables.

According to Table 3, experimental and control groups showed no significant difference in self-efficacy level before intervention ($p > 0.05$) whereas there was a significant difference followed by the intervention ($p < 0.05$). Furthermore, in-group comparison revealed that there was a significant difference in pretest and posttest in the experimental group ($p < 0.05$) while no significant difference was detected in control group ($p > 0.05$).

According to Table 4, experimental and control groups had no significant difference in terms of craving beliefs before intervention ($p > 0.05$) whereas there was a significant difference after the intervention ($p < 0.05$) where craving beliefs were significantly lower in experimental group after the intervention ($p < 0.05$). Also, in-group comparison showed that there was a significant difference in pretest and posttest in the experimental group ($p < 0.05$) while no significant difference was detected in control group ($p > 0.05$); in other words, the intervention in experimental groups resulted in a significant decrease in craving beliefs ($p < 0.05$).

Table 5 shows the levels of self-efficacy in experimental and control groups in terms of each statement in DAASE before and after the intervention. As it can be seen from the table, the highest and lowest scores before the intervention belonged to the sixth and eighth statements in experimental group and ninth and nineteenth statements in control group, respectively. Also, the results obtained from Mann–Whitney *U* test revealed that experimental and control groups before the intervention had a significant difference only in the eighth statement ($p < 0.05$).

Table 2. Demographic information of the participants in the study

		Experimental		Control		*P*-value
		n	%	*n*	%	
Age	18–24	4	8	3	6	0.449*
	25–34	18	36	18	36	
	35–44	19	38	16	32	
	45≤	9	18	13	26	
Gender	Female	0	0	3	6	0.242**
	Male	50	100	47	94	
Education	Elementary	13	26	17	34	0.420**
	Junior	12	24	16	32	
	High school	23	46	15	30	
	University	2	4	2	4	
Marital status	Unmarried	12	24	14	28	0.057**
	Married	36	72	27	54	
	Divorced	2	4	5	10	
	Abandoned	0	0	3	6	
	Other	0	0	1	2	
Children	0	4	10.5	5	13.9	0.856*
	1	7	18.4	8	22.2	
	2	15	39.5	7	19.4	
	3	6	15.8	13	36.2	
	4≤	6	15.8	3	8.3	
Economic status	Good	7	14	3	6	0.068***
	Average	26	52	19	38	
	Bad	17	34	28	56	

(*Continued*)

Table 2. (*Continued*)

		Experimental		Control		*P*-value
		n	%	*n*	%	
Accommodation	Rental	19	38	21	42	0.967**
	Parents'	16	32	15	30	
	Personal	14	28	13	26	
	Homeless	1	2	1	2	
Employment status	Self-employed	22	44	19	38	0.004**
	Clerk	5	10	1	2	
	Worker	16	32	9	18	
	Retired	3	6	2	4	
	Unemployed	3	6	17	34	
	Other	1	2	2	4	
Age of drug abuse onset	<15	5	10	9	18	0.987*
	15–24	33	66	28	56	
	25–34	12	24	11	22	
	35≤	0	0	2	4	
Type of drug	Opium	36	72	29	58	0.161**
	Crystal	2	4	2	4	
	Hashish	1	2	1	2	
	Heroine	1	2	0	0	
	Opium and crystal	4	8	2	4	
	Heroine and opium	2	4	2	4	
	Hashish and opium	1	2	1	2	
	At least three types	3	6	13	26	

(*Continued*)

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Table 2. (*Continued*)

		Experimental		Control		*P*-value
		n	%	*n*	%	
How to use drugs	Smoking	23	46	25	50	0.080**
	Injection	2	4	0	0	
	Oral	14	28	6	12	
	Smoking and injection	0	0	2	4	
	Smoking and oral	8	16	9	18	
	Oral and injection	2	4	2	4	
	All three ways	1	2	6	12	
Number of withdrawal attempts	1	12	24	21	42	0.001***
	2	20	40	5	10	
	3	8	16	10	20	
	4	5	10	1	2	
	5≤	5	10	13	26	
Method of withdrawal	Detoxification	28	56	35	70	0.060***
	Rehabilitation	17	34	7	14	
	Both	5	10	8	16	
Drug abuse in family	Yes	19	38	26	52	0.159***
	No	31	62	24	48	

* Independent samples *t*-test; ** Fisher's exact test; *** chi-square test.

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Table 3. Comparison of the level of self-efficacy in experimental and control groups before and after the intervention

	Experimental	Control	*P*-value*
	Mean ± std	Mean ± std	
Pretest	56.20 ± 18.98	56.98 ± 19.11	0.838
Posttest	62.94 ± 16.68	54.84 ± 19.07	0.026
P-value**	0.009	0.600	

* Independent samples *t*-test; ** Paired samples *t*-test.

Table 4. Comparison of craving beliefs in experimental and control groups before and after the intervention

	Experimental	Control	*P*-value*
	Mean ± std	Mean ± std	
Pretest	72.07 ± 26.70	70.66 ± 23.59	0.779
Posttest	57.70 ± 20.96	72.90 ± 25.12	0.001
P-value**	<0.001	0.628	

* Independent samples *t*-test; ** Paired samples *t*-test.

Moreover, the highest and lowest scores after the intervention were seen for the third and seventh statements in experimental group and ninth and first statements in control group, respectively. Additionally, the results of Mann–Whitney *U* test revealed that after the intervention, experimental and control groups showed significant differences in the third, fourth, fifth, eleventh, twelfth, fourteenth, sixteenth and twentieth statements ($p < 0.05$).

Table 6 displays craving beliefs in experimental and control groups in terms of each statement in CBQ before and after the intervention. According to the table, the highest and lowest scores before the intervention belonged to the nineteenth and second statements in experimental group and fifteenth and second statements in control group, respectively. Also, the results of Mann–Whitney *U* test indicated that experimental and control groups before the intervention had no significant differences in any of the statements ($p > 0.05$).

Besides, the highest and lowest scores after the intervention belonged to the nineteenth and second statements in experimental group and nineteenth and eleventh statements in control group, respectively. Moreover, the results of Mann–Whitney *U* test stated that after the intervention, experimental and control groups showed significant differences in all the statements except for second, third, fourth, fifth, seventh, tenth and nineteenth statements ($p < 0.05$).

4. Discussion

Regarding the emphasis of literature on positive role of self-efficacy and importance of learning to cope with craving beliefs, the present study was formulated in order to determine the role of group education on these important factors pertaining to drug abuse. The results of the study revealed that experimental group had no significant difference in self-efficacy before the intervention ($p > 0.05$), whereas after the group education, self-efficacy of the experimental group rose significantly ($p < 0.05$). In line with these results, the results of the study performed by Hyde, Hankins, Deale, and Marteau (2008) indicated that group education could improve behavioral factors in drug abusers by increasing their self-efficacy.

Importance and role of self-efficacy in drug abusers have been studied both in earlier (e.g. Rounds-Bryant, Flynn, & Craighead, 1997) and recent works (Navarro, Alvarez, Contreras, & Jason,

Table 5. Self-efficacy in experimental and control groups in terms of statements in the tool before and after the intervention

No.	Statement	Group	Pretest		Posttest	
			M± std	MWW	M± std	MWW
1	When I have pain in my body because of not using drugs	Exp.	2.66 ± 1.46	$p = 0.972$	2.80 ± 1.19	$p = 0.359$
		Ctrl	2.64 ± 1.24		2.54 ± 1.16	
2	When I have headache	Exp.	2.72 ± 1.38	$p = 0.678$	3.08 ± 1.15	$p = 0.096$
		Ctrl	2.78 ± 1.13		2.66 ± 1.00	
3	When I feel depressed	Exp.	3.06 ± 1.28	$p = 0.317$	3.46 ± 1.05	$p = 0.002$
		Ctrl	2.80 ± 1.14		2.68 ± 1.28	
4	When I am on holiday and want to rest	Exp.	3.16 ± 1.26	$p = 0.162$	3.32 ± 1.20	$p = 0.029$
		Ctrl	2.82 ± 1.19		2.78 ± 1.26	
5	When I am worried about someone	Exp.	3.12 ± 1.30	$p = 0.125$	3.40 ± 0.96	$p = 0.041$
		Ctrl	2.76 ± 1.11		2.90 ± 1.23	
6	When I am anxious	Exp.	3.18 ± 1.30	$p = 0.122$	3.22 ± 1.07	$p = 0.364$
		Ctrl	2.76 ± 1.13		3.00 ± 1.24	
7	When I am under pressure	Exp.	2.86 ± 1.57	$p = 0.714$	2.74 ± 1.35	$p = 0.902$
		Ctrl	2.72 ± 1.26		2.68 ± 1.22	
8	When I am offered to use drugs in gatherings	Exp.	2.48 ± 1.44	$p = 0.017$	2.70 ± 1.31	$p = 0.473$
		Ctrl	3.10 ± 1.16		2.86 ± 1.19	
9	When I dream of using drug	Exp.	2.82 ± 1.41	$p = 0.243$	3.24 ± 1.17	$p = 0.342$
		Ctrl	3.16 ± 1.03		3.02 ± 1.13	
10	When I want to test my will power against using drug	Exp.	2.66 ± 1.50	$p = 0.306$	3.08 ± 1.45	$p = 0.265$
		Ctrl	2.90 ± 1.24		2.76 ± 1.22	
11	When I need to use drug physically or I have craving	Exp.	2.76 ± 1.34	$p = 0.713$	3.16 ± 1.29	$p = 0.042$
		Ctrl	2.78 ± 1.11		2.68 ± 1.10	

(*Continued*)

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Table 5. (*Continued*)

No.	Statement	Group	Pretest		Posttest	
			M± std	MWW	M± std	MWW
12	When I am physically tired	Exp.	2.70 ± 1.31	$p = 0.319$	3.18 ± 1.02	$p = 0.018$
		Ctrl	2.94 ± 1.05		2.64 ± 1.17	
13	When I feel pain or experience physical injury	Exp.	2.62 ± 1.29	$p = 0.594$	3.18 ± 1.10	$p = 0.067$
		Ctrl	2.72 ± 1.10		2.76 ± 1.11	
14	When I feel shattered because of anger and dejection	Exp.	2.60 ± 1.34	$p = 0.553$	3.42 ± 1.16	$p = 0.002$
		Ctrl	2.74 ± 1.30		2.60 ± 1.26	
15	When I see others using drugs at a party	Exp.	2.70 ± 1.34	$p = 0.153$	2.94 ± 1.23	$p = 0.161$
		Ctrl	3.04 ± 1.14		2.58 ± 1.27	
16	When I feel I am always unlucky	Exp.	3.10 ± 1.29	$p = 0.247$	3.32 ± 1.22	$p = 0.025$
		Ctrl	2.80 ± 1.24		2.76 ± 1.22	
17	When I am encouraged to use drug by those I used to use drug with	Exp.	2.84 ± 1.57	$p = 0.411$	3.10 ± 1.37	$p = 0.436$
		Ctrl	3.04 ± 1.16		2.86 ± 1.21	
18	When I feel angry inside	Exp.	2.68 ± 1.30	$p = 0.660$	3.28 ± 1.16	$p = 0.050$
		Ctrl	2.78 ± 1.13		2.86 ± 1.15	
19	When I am involved with a intense tendency to use drug	Exp.	2.58 ± 1.44	$p = 0.700$	2.94 ± 1.42	$p = 0.112$
		Ctrl	2.62 ± 1.21		2.46 ± 1.16	
20	When I am excited and having fun	Exp.	2.90 ± 1.35	$p = 0.404$	3.40 ± 1.27	$p = 0.028$
		Ctrl	3.08 ± 1.19		2.84 ± 1.13	

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Table 6. Craving beliefs in experimental and control groups in terms of statements in the tool before and after the intervention

No.	Statement	Group	Pretest		Posttest	
			M± std	MWW	M± std	MWW
1	Craving for prescription opioids is a physical reaction; therefore, I can't do anything about it.	Exp.	3.06 ± 1.92	$p = 0.585$	2.56 ± 1.43	$p = 0.019$
		Ctrl	3.20 ± 1.76		3.30 ± 1.59	
2	If I don't stop the cravings for prescription opioids, they will get worse.	Exp.	5.26 ± 2.14	$p = 0.270$	4.14 ± 2.00	$p = 0.218$
		Ctrl	5.08 ± 1.92		4.58 ± 2.08	
3	Craving for prescription opioids can drive you crazy.	Exp.	4.68 ± 2.14	$p = 0.235$	3.84 ± 1.95	$p = 0.492$
		Ctrl	4.20 ± 2.16		4.14 ± 2.02	
4	The craving makes me use prescription opioids.	Exp.	4.28 ± 2.13	$p = 0.346$	2.96 ± 1.76	$p = 0.775$
		Ctrl	3.86 ± 1.87		3.06 ± 1.82	
5	I'll always have cravings for prescription opioids.	Exp.	3.82 ± 2.26	$p = 0.453$	3.28 ± 1.73	$p = 0.286$
		Ctrl	3.44 ± 2.05		3.68 ± 1.85	
6	I don't have any control over the craving for prescription opioids.	Exp.	3.28 ± 2.02	$p = 0.396$	2.46 ± 1.44	$p = 0.043$
		Ctrl	2.88 ± 1.72		3.18 ± 1.78	
7	Once the craving for prescription opioids start, I have no control over my behavior.	Exp.	3.16 ± 2.05	$p = 0.983$	2.62 ± 1.48	$p = 0.546$
		Ctrl	3.00 ± 1.73		2.88 ± 1.69	
8	I'll have cravings for prescription opioids the rest of my life.	Exp.	3.44 ± 2.17	$p = 0.809$	2.92 ± 1.65	$p = 0.059$
		Ctrl	3.50 ± 1.98		3.60 ± 1.84	
9	I can't stand the physical symptoms I have while craving prescription opioids.	Exp.	3.14 ± 1.87	$p = 0.501$	2.54 ± 1.38	$p = 0.004$
		Ctrl	3.38 ± 1.81		3.76 ± 2.06	
10	The craving is my punishment for using prescription opioids.	Exp.	4.08 ± 2.20	$p = 0.575$	3.54 ± 1.72	$p = 0.463$
		Ctrl	3.88 ± 1.97		3.84 ± 2.11	
11	If people have never used prescription opioids then they have no idea what the craving is like (and they can't expect me to resist).	Exp.	5.48 ± 2.08	$p = 0.216$	3.76 ± 1.76	$p = 0.007$
		Ctrl	5.06 ± 2.17		4.76 ± 2.11	

(*Continued*)

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Table 6. (*Continued*)

No.	Statement	Group	Pretest		Posttest	
			M± std	MWW	M± std	MWW
12	The images/thoughts I have while craving prescription opioids are out of my control.	Exp.	3.20 ± 1.95	$p = 0.252$	2.76 ± 1.33	$p = 0.034$
		Ctrl	3.50 ± 1.66		3.64 ± 1.91	
13	The craving for prescription opioids makes me so nervous I can't stand it.	Exp.	3.34 ± 1.86	$p = 0.882$	2.78 ± 1.40	$p = 0.002$
		Ctrl	3.32 ± 1.65		3.96 ± 1.91	
14	I'll never be prepared to handle the craving for prescription opioids.	Exp.	3.04 ± 1.84	$p = 0.191$	2.48 ± 1.46	$p = 0.002$
		Ctrl	3.52 ± 1.84		3.72 ± 1.94	
15	Since I'll have the craving the rest of my life I might as well go ahead and use prescription opioids.	Exp.	2.78 ± 1.96	$p = 0.881$	2.20 ± 1.55	$p = 0.011$
		Ctrl	2.70 ± 1.68		2.96 ± 1.73	
16	When I'm really craving prescription opioids I can't function.	Exp.	3.54 ± 1.71	$p = 0.726$	2.82 ± 1.42	$p = 0.004$
		Ctrl	3.68 ± 1.72		3.90 ± 1.87	
17	I'm either craving prescription opioids or I'm not; there is nothing in between.	Exp.	3.74 ± 1.74	$p = 0.284$	3.08 ± 1.65	$p = 0.012$
		Ctrl	3.44 ± 1.70		4.00 ± 1.77	
18	If the craving gets too intense, using prescription opioids is the only way to cope with the feeling.	Exp.	2.82 ± 1.92	$p = 0.534$	2.48 ± 1.47	$p = 0.037$
		Ctrl	2.92 ± 1.72		3.20 ± 1.75	
19	When craving prescription opioids, it's OK to use prescription opioids to cope.	Exp.	2.56 ± 1.75	$p = 0.336$	2.02 ± 1.23	$p = 0.127$
		Ctrl	2.82 ± 1.71		2.42 ± 1.40	
20	The craving for prescription opioids is stronger than my will power.	Exp.	3.38 ± 2.35	$p = 0.865$	2.46 ± 1.50	$p < 0.001$
		Ctrl	3.28 ± 2.22		4.32 ± 2.22	

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2016). In this regard, Minervini et al. (2011) uttered that the high levels of self-efficacy can be one of the main contributors in coping with risky situations where craving beliefs are encountered. The results of the present study show that the role of self-efficacy on the ability of drug abusers to cope with craving beliefs is evident and it has a distinct relationship with personal beliefs and capability of performing different tasks. Therefore, having various abilities and performing different programs for withdrawal without having an acceptable level of self-efficacy might yield unfavorable results (Habibi, Kareshki, Dashtgard, Heidari, & Talaei, 2012). As a whole, it can be said that all the programs and measures regarding drug abuse withdrawal should put a clear emphasis on the levels of self-efficacy in patients.

The results of the current study further showed that there was no significant difference in craving beliefs between experimental and control groups ($p > 0.05$) while after the intervention, the craving beliefs significantly decreased in experimental group who took part in group education sessions compared to the control group who did not participate in such sessions ($p < 0.05$). Consistent with these results, Navidian, Kermansaravi, Tabas, and Saeedinezhad (2016) and Mesrahi et al. (2016) showed that group education in addition to medicinal treatment with methadone would boost the motivation of withdrawal and reduction of craving in drug abusers. Therefore, group education is required to be incorporated along with medicinal therapies because it reduces relapse during methadone treatment. Furthermore, Esmatpanah and Khakshour (2009) found that group education of life skills significantly reduced the tendency of participants to drug abuse. Also, Kafi, Molazadeh Esfanjani, Nouri, and Salehi (2011) revealed that group therapy would reduce craving beliefs in detoxified patients.

Group education may give required skills of withdrawal to participants by teaching them how to cope with negative emotions and behaviors and may help them adopt new and more suitable behaviors. In fact, effectiveness of group education is through teaching participant how to manage their craving beliefs (Hashemi, 2015). Group education is mainly focused on life style of participants. In other words, it teaches participants how to prevent from destructive behaviors and how to lead a drug-free life. Group education improves life style of participants by creating personal honesty, responsibility, effective social skills and by eliminating anti-social attitudes and criminal behavior (Saddock, Sadock, & Ruiz, 2015).

Table 5 shows the results in terms of the third objective of this study. As evident in the table, after the intervention, control and experimental groups are significantly different in eight items (Table 5). These results conform to the content of group education. For example, the third item can be associated with education based upon symptoms of drug abuse and controlling emotions in the first and sixth sessions. Furthermore, positive role of education on increasing positive thoughts in the last session should not be neglected. Moreover, the fourth item is related to wrong beliefs of drug abusers, which was taught in the fifth session. It seems that group education was successful to reduce incorrect thoughts regarding drug abuse for fun in rest time. In addition, the positive effect of educating anger control in the seventh session is clearly seen in the fourteenth item. Finally, Table 6 demonstrates the results in terms of the fourth objective of this study. Except for seven items, significant differences existed between experimental and control groups in terms of craving beliefs. This indicates the positive effect of group education on decreasing craving feelings.

The results of the this study may present precious inferences regarding the influence of self-efficacy and managing craving beliefs through group education in drug abusers wishing to have a successful and permanent withdrawal. Nevertheless, there were a few limitations. While the present study generated valuable information on the role of group education to enhance self-efficacy and reduce craving beliefs in drug abusers, the results are limited because they are solely related to the participants in a treatment center in Iran and therefore, cannot be generalized to other cultures and ethnic groups. Another limitation of the current study is that because of lack of interest reported by the participants, a follow-up study in order to determine long-term effect of group education on participants' self-efficacy and craving beliefs could not be performed.

In spite of the limitations, this study pointed to the positive influence of group education of improving life style of drug abusers by enhancing their self-efficacy and reducing craving beliefs. Therefore, such educations should be embedded in all other types of drug abuse treatment procedures. However, further studies are required in order to shed light on reciprocal effects of group education with various types of drug abuse treatments in different groups of subjects.

5. Conclusion

The present study aims to evaluate the role of group education on self-efficacy and craving beliefs in drug abusers. The results of the study confirmed both hypotheses of the study. Before the intervention, there was no significant difference in terms of self-efficacy and craving tendencies between control and experimental groups. However, the mean self-efficacy significantly increased and majority of craving tendencies significantly decreased after the group education. Therefore, it can be concluded that group education can improve life style of drug abusers through enhancing their self-efficacy and reducing craving beliefs.

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References

Ashrafioun, L. (2014). *An evaluation of the impact of cue exposure on the relationship between pain level and craving for prescription opioids* (A thesis submitted to fulfill PhD in clinical psychology). Bowling Green State University.

Badger, G. J., Bickel, W. K., Giordano, L. A., Jacobs, E. A., Loewenstein, G., & Marsch, L. (2007). Altered states: The impact of immediate craving on the valuation of current and future opioids. *Journal of Health Economics*, *26*(5), 865–876. doi:10.1016/j.jhealeco.2007.01.002

DiClemente, C. C., Carbonari, J. P., Montgomery, R., & Hughes, S. O. (1994). The alcohol abstinence self-efficacy scale. *Journal of Studies on Alcohol*, *55*(2), 141–148.

Dolan, S. L., Martin, R. A., & Rohsenow, D. J. (2008). Self-efficacy for cocaine abstinence: Pretreatment correlates and relationship to outcomes. *Addictive Behaviors*, *33*(5), 675-688.

Esmatpanah, O., & Khakshour, H. (2009). Effect of education of life skills on tendency to drug use in addiction treatment and rehabilitation centers. *Drug Abuse Journal*, *10*(12), 41–52. [Persian].

Fereidouni, Z. (2014). *The process of social support of male drug abusers by their wives: A model* (A thesis submitted to fulfill PhD in nursing, faculty of nursing and midwifery). Iran University of Medical Sciences, Tehran. [Persian].

Habibi, R., Kareshki, H., Dashtgard, A., Heidari, A., & Talaei, A. (2012). Validation and determination of reliability of self-efficacy questionnaire for drug abuse withdrawal. *Hakim*, *15*(1), 53–59. [Persian].

Hashemi, F. (2015). *Effectiveness of cognitive group psychotherapy on mental health and life quality of drug abusers' spouses* (A thesis submitted to fulfill M.A. in psychology). Payam-e-Noor University. [Persian].

Hernandez, A. E., & Araiza, S. M. (2014). *Beliefs about substance abuse among adolescents: What works?* (Electronic theses, projects, and dissertations). Paper 61.

Hyde, J., Hankins, M., Deale, A., & Marteau, T. M. (2008). Interventions to increase self-efficacy in the context of addiction behaviours: A systematic literature review. *Journal of Health Psychology*, *13*(5), 607–623. doi:10.1177/1359105308090933

Ibrahim, F., Kumar, N., & Samah, B. A. (2011). Self-efficacy and relapsed addiction tendency: An empirical study. *Social Sciences*, *6*(4), 277–282. doi:10.3923/sscience.2011.277.282

Jalali, A., Seyedfatemi, N., & Peiravi, H. (2015). Self-deceiving and self-deceiving, the main mechanism in relapse process in drug abusers. *Clinical Care*, *1*, 46–57. [Persian].

Kadden, R. M., & Litt, M. D. (2011). The role of self-efficacy in the treatment of substance use disorders. *Addictive Behaviors*, *36*(12), 1120–1126. doi:10.1016/j.addbeh.2011.07.032

Kafi, S. M., Molazadeh Esfanjani, R., Nouri, M., & Salehi, E. (2011). Effectiveness of group therapy by mutual behavior assessment method on dyadic adjustment and prevention from relapse in detoxified patients. *Drug Abuse Journal*, *3*(10), 11–28.

Marlatt, G. A., & Donovan, D. M. (2005). *Relapse prevention: Maintenance strategies in the treatment of addictive behaviors*. New York, NY: Guilford Press.

McKeever, A. E., Spaeth-Brayton, S., & Sheerin, S. (2014). The role of nurses in comprehensive care management of pregnant women with drug addiction. *Nursing for Women's Health*, *18*, 284–293. doi:10.1111/1751-486X.12134

Mesrahi, T., Sedighi, M., & Shirali, M. (2016). The effect of cognitive-behavioral group therapy on decrease in addiction relapse in randomly assigned addicts under drug therapy: A statistical analysis. *International Journal of Neurorehabilitation*, *3*, 1–6. doi:10.4172/2376-0281.1000214

Minervini, I., Palandri, S., Bianchi, S., Bastiani, L., & Paffi, D. (2011). Desire and coping self-efficacy as craving measures in addiction: The self-efficacy and desire scale (SAD). *Open Behavioral Science Journal*, *5*, 1–7. doi:10.2174/1874230001105010001

Navarro, E., Alvarez, J., Contreras, R., & Jason, L. (2016). Ethnic differences in abstinence self-efficacy among recovering individuals. *Journal of Addiction Medicine*

and Therapeutic Science, *2*(1), 13–18. doi:10.17352/2455-3484.000015

Navidian, A., Kermansaravi, F., Tabas, E. E., & Saeedinezhad, F. (2016). Efficacy of group motivational interviewing in the degree of drug craving in the addicts under the methadone maintenance treatment (MMT) in South East of Iran. *Archives of Psychiatric Nursing*, *30*(2), 144–149. doi:10.1016/j.apnu.2015.08.002

Nikmanesh, Z., Baluchi, M. H., & Motlagh, A. A. P. (2016). The role of self-efficacy beliefs and social support to predict addiction relapse. *International Journal of High Risk Behaviors and Addiction*, *6*(1), e21209. doi:10.5812/ijhrba.21209

Reese, E. D., & Veilleux, J. C. (2016). Relationships between craving beliefs and abstinence self-efficacy are mediated by smoking motives and moderated by nicotine dependence. *Nicotine & Tobacco Research*, *18*(1), 48–55.

Rehm, J., Patra, J., & Degenhardt, L. (2010). Psychoactive substance use: Epidemiology and burden of disease. *ATLAS on Substance Use*, *22*, 7–22.

Rounds-Bryant, J. L., Flynn, P. M., & Craighead, L. W. (1997). Relationship between self-efficacy perceptions and in-treatment drug use among regular cocaine users. *The American Journal of Drug and Alcohol Abuse*, *23*(3), 383–395.

Saddock, B. J., Sadock, V. A., & Ruiz, M. D. (2015). *Kaplan and Sadock synopsis of psychiatry: Behavioral sciences clinical psychiatry* (8th ed.). Baltimong, New York, Landon: Williams & Wilkins co.

Shives, L. R. (2012). *Basic concepts of psychiatric-mental health nursing* (Vol. 11, pp. 199–229). Baltimong, New York, Landon: Williams & Wilkins co.

Torrecillas, F. L., Torres Cobo, M., Delgado, P., & Ucles, I. R. (2015). Predictive capacity of self-efficacy in drug dependence and substance abuse treatment. *Journal of Psychology and Clinical Psychiatry*, *2*(3), 1–7. doi:10.15406/jpcpy.2015.02.00073

Videbeck, S. (2013). *Psychiatric-mental health nursing*. Baltimong, New York, Landon: Williams & Wilkins co.

Wright, F. D. (2001). Craving beliefs questionnaire. In A. T. Beck, F. D. Wright, & C. F. Newman (Eds.), *Cognitive therapy of substance abuse* (pp. 311). New York, NY: Guilford Press.

Yildirim, F., & Ilhan, I. Ö. (2010). The validity and reliability of the general self-efficacy scale-Turkish form. *Turk Psikiyatri Dergisi*, *21*(4), 301.